



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,167	10/09/2003	Yasuaki Fukada	1248-0674P	6469
2292	7590	10/05/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			NGUYEN, ANTHONY H	
			ART UNIT	PAPER NUMBER
			2854	

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/681,167

Applicant(s)

FUKADA ET AL.

Examiner

Anthony H Nguyen

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/09/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Objections

Claims 3,4,10-12 and 14-16 are objected to because of the following informalities: The language "the second sheet detection means" (claims 3 and 14) is vague since it appears that the detection means is used for detecting sheets conveying in the second path. Therefore, "sheet" should obviously be --path--. In claims 4, 9-11, 15 and 16, the abbreviation "PS" is unclear in meaning. Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1- 3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Noguchi et al. (US 4,978,980).

With respect to claims 1 and 5, Noguchi et al. teaches a two-side image forming apparatus having a first transferring path 508 for transferring one-side printed sheet to a tray 507 from a supply tray or a sheet storage section 501 and a second transferring path or a duplex path 509 connected to the first transferring path for feeding the one-side printed sheet to an imaging forming means 505 so that the plurality of sheets are transferred concurrently in the transferring paths as shown in Figs. 21 and 22 of Noguchi et al. With respect to claim 2, Noguchi et al. teaches the switchback means 516 located upstream of the tray 507 (Noguchi et al., Fig.21).

Art Unit: 2854

With respect to claim 3, Fig.29 of Noguchi et al. shows the conventional use of a sensor (d) in the second path 609.

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 - 16 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Noguchi et al. (US 4,978,980) in view of Yasui et al. (US 5,839,032).

Noguchi et al. teaches all that is claimed, except the rollers located at the crossing point between the first and second transferring paths. Yasui et al. teaches a two-side image forming apparatus having the rollers 34a and 34b located at the crossing point between the first conveying path 33 and the second conveying path or the duplex path 92 (Yasui et al., Fig.3). Therefore, in view of the teaching of Yasui et al., it would have been obvious to one of ordinary skill in the art to modify the image forming apparatus of Noguchi et al. by providing the rollers located at the crossing point between the two conveying paths as taught by Yasui et al. to improve the efficiency of transferring sheets in the two-side image forming apparatus. With respect to claims 6-16, the selection of a desired period or timing for feeding a sheet from a tray or to an image forming device while the switchback means reverses the other sheet to a second path, and the selection of a desired location of the detection means on the transferring

Art Unit: 2854

paths would be obvious through routine experimentation in order to get the maximum number of printed sheets in a shortest time.

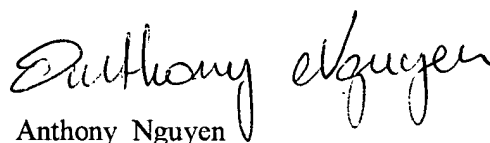
Conclusion

The patents to Azeta, Goto et al, Taninaka et al., McIrvine are cited to show other structures having obvious similarities to the claimed structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Nguyen whose telephone number is (571) 272-2169. The examiner can normally be reached daily from 9 AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld, can be reached on (571) 272-2168. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Anthony Nguyen
9/30/04
Patent Examiner
Technology Center 2800